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REMARKS

The present response is to the Office Action mailed in the above-referenced case on September 14, 2007. Claims 1-28 are pending for examination.

Claim Objections

1. Claims 1, 2, 4, 9, 11, 18, and 25 are objected to because of the following informalities:

In claims 1 and 2, line 9 and line 1, respectively, "facility" should be amended to -component -- to avoid lack of antecedent basis.

Each of claims 4, 9, 11, 18 and 25 recites a limitation "capable of" which is not a positive recitation. Under MPEP 2111.04, "language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim limitation."

Appropriate correction is required.

Applicant's Response

Applicant herein amends the claims as required.

Double Patenting Rejections

Claims 3, 4, 6, 7, 10, 11, 13, 14, 17, 18, 20, 21, 24, 25, 27 and 28 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 2, 4-7, 9-12, and 14-17, 19 and 20, respectively of prior U.S. Patent No. 6,712,312. This is a double patenting rejection.

Applicant's Response

The Examiner has rejected all of the dependent claims of the present application under 35 U.S.C. 101 double patenting rejection over patent 6,712,312. Applicant points

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out that the Examiner has provided an improper number for the patent relied upon in the rejection. Applicant believes the correct number is 6,721,312 and assumes for the sake of the present response that 6,721,312 is the correct patent number.

Applicant points out that claims 3, 4, 6, 7, 10, 11, 13, 14, 17, 18, 20, 21, 24, 25, 27 and 28 involved in the rejection are all claims which depend from independent claims that are not included in the rejection. Applicant asserts that the claims are therefore not drawn to identical subject matter. The independent claims are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-3, 6-8, 11-13, and 16-18 of U.S. Patent No. 6,721,312, respectively. Therefore applicant argues the dependent claims should also be included in the latter rejection for the independent claims and the present 101 rejection should be withdrawn.

Examiner's rejection

4. Claims 1, 2, 5, 8, 9, 12 15 16, 19, 22, 23, and 26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-3, 6-8, 11-13, and 16-18 of U.S. Patent No. 6,712,312, respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are not patentably distinct from each other because each corresponding claim of Patent No. 6,712312 contains every element of the corresponding claim of the instant application and as such anticipates the instant application.

Applicant's Response

Applicant herein files a Terminal Disclaimer in compliance with 37 CFR1.321(c) in order to overcome the rejection.

Merit Rejection under 102(e)

6. Claims 1, 8, 15 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Wicklund (U.S. patent No. 6,295,295).

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Examiner's rejection

Regarding claims 1, 8, 15 and 22, Wicklund discloses a fabric card, a packet switch, a router (FIG. 2) for routing data packets comprising:

- a plurality of ingress/egress ports (8 and 12);
- a switching component (switch core 3) through which the ports connect; and
- a scheduling component (a packet transfer scheduler 18) for scheduling communication between the plurality of ports through the switching component; wherein that data (ATM cells) coming into one of the plurality of ports is organized into specific data-packet trains (Current list 42), each having an end-of-train (EOT) identifier (an explicitly value or one single bit marker in the last cell of the Current list 42, col. 7, lines (14-20) and the switch recognizes the EOT identifiers and switches transmission to a next port and train accordingly and to recognize the end the train (Current list 42).

However, Wicklund does not teach that a mark in a cell indicating a start-of-train (SOT) in the Current list 42 as recited in the claims.

it would have been obvious to one having ordinary skill in the art to incorporate a mark indicating the start of the train into the first cell of the Current list as well as the end of train mark such that the switch could recognize the boundary of the train more clearly.

Applicant's Response

Applicant is confused as to the actual rejection the Examiner is attempting to assert. The preamble of the rejection presents qualifications for a 103 rejection, while the actual rejection recites a 102(e). Because the Examiner includes an "obviousness" portion of the rejection, applicant must assume for the sake of the present rejection that the actual rejection is under section 103. Applicant respectfully requests the Examiner formerly clarify the accurate rejection and primary reference relied upon in the Office Action immediately following the present response.

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Regarding independent claims 1, 8, 15 and 22, applicant herein amends the independent claims to further limit data coming into one of the plurality of ports is organized into specific data-packet trains, transmitted from a same ingress port and destined to a same egress port, each having a start-of-train (SOT) identifier and an end-of-train (EOT) identifier. Applicant's claim1, as amended, is produced below:

1. (Currently amended) A fabric card for routing data packets comprising:
 - a plurality of ingress/egress ports;
 - a switching component through which the ports connect; and
 - a scheduling component for scheduling communication between the plurality of ports through the switching component;characterized in that data coming into one of the plurality of ports is organized into specific data-packet trains, transmitted from a same ingress port and destined to a same egress port, each having a start-of-train (SOT) identifier and an end-of-train (EOT) identifier, and wherein the switching component recognizes the SOT and the EOT identifiers switches transmission to a next port and train accordingly.

The Examiner relies upon the **Current list 42** to read on the trains as claimed in applicant's invention. Applicant points out that Current list 42 is a queue emptying data into one outlet port. Wicklund teaches in column 6 (emphasis added):

"Returning to FIG. 3, the scheduler 18 comprises a first queue structure 40 for each outlet port, into which the cells are sorted according to their outlet port. The scheduler further comprises means 28 for sorting said cell 32 into the appropriate first queue structure 40.

FIG. 4 is a schematic diagram of a queue structure according to a preferred embodiment of the invention. The first queue structure 40 comprises two subqueue structures, Next 41 and Current 42. In each scheduler 18, there is one pair of current and next queues for each outlet. Current 42 is the queue from which cells are currently being

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read, while the sorting means 28 sorts the received cell 32 into Next 41. When all cells have been read from Current 42, the subqueue structures Next 41 and Current 42 are swapped, so that Next becomes the new Current, from which cells are read, and the empty Current becomes the new Next, into which cells are read."

"Each scheduler 18 also comprises a second queue structure 50, called VPI/VCI-list of cells 32, that is, one queue for each VP VC in the exchange, into which the cells 32 are sorted by sorting means 28 according to the logical channel code VPI/VCI of each cell 32. This queue structure 50 is used when the incoming cell has a VPI VCI for which there is already a cell in Next 41. The sorting means 28 also transfers cells from the VPI VCI-list 50 to the first queue structure 40."

"First suppose that the queues are empty, so that all counters are set to zero. When a first cell 32 with a first VPI /VCI and a first outlet port 14 arrives, it is placed in the Next 41 queue for that outlet port, and the counter for that VPI VCI is incremented, i.e. set to 1. When a second cell 32 with the same outlet port 14 but with a second VPI VCI arrives, it is placed in the same Next 41 queue, and the counter for the second VPI/VCI is incremented, i.e. set to 1. Next, suppose that a third cell 32 with the same VPI/VCI and outlet port 14 as the first cell arrives. The counter for this VPI VCI is 1, indicating that there is already a cell for this VPI VCI in Next. Therefore, the incoming cell is sorted into the second queue 50 for the first VPI VCI, and the counter is incremented, i.e. set to 2."

Applicant points out that Current list 42 does not contain data packets arranged into trains, as claimed. The invention does provide a sorting function; "providing one queue for each VP/ VC in the exchange, into which the cells 32 are sorted by sorting means 28 according to the logical channel code VPI/VCI of each cell 32, in a separate data queue structure 50, which feeds into structure 40 including subqueue 42.

Applicant argues that trains organized into specific data-packet trains, transmitted from a same ingress port and destined to a same egress port, each having a start-of-train

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(SOT) identifier and an end-of-train (EOT) identifier, and wherein the switching component recognizes the SOT and the EOT identifiers switches transmission to a next port and train accordingly is not specifically taught or suggested in Wicklund. Because Wicklund provides a separate queue for each outlet port (Current list 42) and the queue is always emptied, the system only requires acknowledgement of last packet in queue (EOQ). There is no need or motivation for Wicklund to teach or suggest an SOT and EOT for specific data packet trains because current list 42 is always transmitting to the same port and does not need to be notified to switch transmission to a next port and train. Therefore, the reference of Wicklund not only fails to specifically teach the data packet train structure, as claimed, but also is completely void of any requirement, need or motivation to achieve switching between trains, as claimed, because separate queues are set up for each outlet port in Wicklund.

Applicant believes claims 1, 8, 15 and 22, as amended, are easily patentable over the 102(e) or 103 rejection intended by the Examiner as argued above. Claims 2-7, 9-14, 16-21 and 23-28 are patentable on their own merits, or at least as depended from a patentable claim.

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Summary

It is therefore respectfully requested that this application be reconsidered, the claims be allowed, and that this case be passed quickly to issue. If there are any time extensions needed beyond any extension specifically requested with this amendment, such extension of time is hereby requested. If there are any fees due beyond any fees paid with this amendment, authorization is given to deduct such fees from deposit account 50-0534.

Respectfully submitted
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